

**Claims:**

1. An external topical hydrogel preparation comprising a prostaglandin I<sub>2</sub> derivative for prevention or treatment of penile erectile dysfunction.
2. An external topical hydrogel preparation comprising a prostaglandin I<sub>2</sub> derivative for improving coital dysfunction.
3. The preparation according to claim 1 or 2, wherein the prostaglandin I<sub>2</sub> derivative is a 4,8-inter-m-phenylenePGI<sub>2</sub> derivative.
4. The preparation according to claim 1 or 2, wherein the prostaglandin I<sub>2</sub> derivative is beraprost sodium.
5. The preparation according to any one of claims 1 to 4, wherein said preparation comprises one or more members of gelling agents selected from seaweed extracts, mucopolysaccharides, animal protein and a cellulose derivative.
6. The preparation according to any one of claims 1 to 4, wherein said preparation comprises one or more members of gelling agent selected from alginate, kelp extarct, fucoidan, uronic acid, chondroitin sulfate, hyaluronate, gelatin, atelocollagen and carboxymethylcellulose.
7. The preparation according to any one of claims 1 to 6, wherein said preparation further comprises hydrophilic petrolatum.
8. The preparation according to any one of claims 1 to 7, wherein said preparation further comprises

inorganic salts.

9. The preparation according to any one of claims 1 to 8, wherein said preparation further comprises one or more members selected from a androgenic hormone preparation, an aphrodisiac drug, a spermatogenic promoter, a nitric monoxide-producing agent, amino acids and a phosphodiesterase 5 inhibitor.

10. The preparation according to any one of claims 1 to 9, wherein said preparation is administered to a penile area.

11. The preparation according to any one of claims 1 to 9, wherein said preparation is a liniment or an agent for intra-urethral infusion.

12. The preparation according to any one of claims 1 to 11, wherein said preparation is a powdered gel preparation.

13. Use of a hydrogel which comprises a prostaglandin  $I_2$  derivative for the production of an external topical preparation for prevention or treatment of penile erectile dysfunction.

14. A method for treatment of penile erectile dysfunction, characterized in that the hydrogel which contains a prostaglandin  $I_2$  derivative is administered to a penis or a urethra of a subject.